Claims

What is claimed is:

1.   A computer-readable medium having stored thereon computer-executable instructions for performing steps of:

receiving an indication of a selected portion of a document that is suitable for display via a computer-based device;

determining a hard break in the document immediately prior to the selected portion; and

determining a reproducible page corresponding to the selected portion based upon the hard break.

2.   The computer-readable medium of claim 1, further comprising computer-executable instructions for performing the step of determining the hard break based on a hard break index for the document.

3.   The computer-readable medium of claim 1, wherein the computer-executable instructions for performing the step of determining the reproducible page further comprise computer-executable instructions for performing steps of:

determining one or more active formatting tags applicable to the hard page break; and

formatting pages from the hard break to the selected portion, inclusive of the selected portion, based on the one or more active formatting tags to provide a formatted selected portion; and

providing the formatted selected portion as the reproducible page.

4.   The computer-readable medium of claim 3, further comprising computer-executable instructions for performing steps of:

formatting at least a portion of the document subsequent to the formatted selected portion to provide a subsequent formatted portion; and

providing the formatted selected portion as the reproducible page when the subsequent

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formatted portion is acceptably formatted.

5.   The computer-readable medium of claim 3, further comprising computer-executable instructions for performing the step of determining the one or more active formatting tags based on an index of active formatting tags for the document.

6.   The computer-readable medium of claim 1, further comprising computer-executable instructions for performing steps of:

   calculating a number of pages inclusively between the reproducible page and the hard break;

   calculating a sum of page counts between a plurality of hard breaks prior to and including the hard break; and

   calculating a page number by adding the number of pages to the sum of page counts.

7.   The computer-readable medium of claim 6, further comprising computer-executable instructions for performing steps of:

   displaying the reproducible page on a display of the computer-based device; and

   displaying the page number within the reproducible page on the display.

8.   The computer-readable medium of claim 7, further comprising computer-executable instructions for performing the step of displaying the reproducible page no later than calculating the page number.

9. A computer-readable medium having stored thereon a data structure comprising:

hard break information relating occurrences of at least one hard break to locations within a document, wherein the document is suitable for display via a computer-based device; and

active formatting tag information regarding occurrences of one or more active formatting tags applicable to each of the at least one hard break listed in the hard break information,

wherein a reproducible page may be determined for any selected portion of the document based on the hard break information and the active formatting tag information.

10. The computer-readable medium of claim 9, wherein the hard break information is incorporated into a hard break index.

11. The computer-readable medium of claim 9, wherein the active formatting tag information is incorporated into an active formatting tag index.

12. The computer-readable medium of claim 9, wherein the active formatting tag information is incorporated within the document.

13. The computer-readable medium of claim 12, wherein the active formatting tag information comprises pointers to start tags.

14. The computer-readable medium of claim 9, the data structure further comprising:
the document comprising tags.

15. The computer-readable medium of claim 14, wherein the formatting tags comprise any of: XML tags, HTML tags and SGML tags.

16. The computer-readable medium of claim 14, wherein the document and tags are numerically-

encoded.

17.   The computer-readable medium of claim 9, the data structure further comprising:
the document stored as at least one content stream.

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18.   The computer-readable medium of claim 9, wherein the hard break information relating occurrences of the at least one hard break to locations within the document comprises, for each hard break of the at least one hard break, an offset value, relative to the beginning of the document, indicative of location of the hard break.

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19.   The computer-readable medium of claim 9, wherein the active formatting tag information regarding occurrences of one or more active formatting tags applicable to each of the at least one hard break further comprises, for each hard break of the at least one hard break, one or more offset values, relative to the beginning of a content stream forming a part of the document, indicative of

15   locations of the one or more active formatting tags.

20.   The computer-readable medium of claim 9, wherein the hard break index further comprises, for each of the at least one hard break, an offset value, relative to a beginning of the active formatting tag index, indicative of a location of a corresponding portion of the active formatting tag index.

21.   An apparatus comprising:

a processor;

a display coupled to the processor;

a user interface selection device coupled to the processor; and

5   a storage device, coupled to the processor, comprising instructions, executable by the processor, for performing steps of:

receiving an indication via the user interface selection device of a selected portion of a document that is suitable for presentation via the display;

determining a hard break in the document immediately prior to the selected portion;

10   determining a reproducible page corresponding to the selected portion based upon the hard break; and

calculating a page number corresponding to the selected portion by adding a number of pages inclusively between the reproducible page and the hard break to a sum of page counts between a plurality of hard breaks prior to and including the hard break.

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22.   The apparatus of claim 21, the storage device further comprising instructions for performing steps of:

determining one or more active formatting tags applicable to the hard page break; and

formatting pages from the hard break to the selected portion, inclusive of the selected portion,

20   based on the one or more active formatting tags to provide a formatted selected portion; and

providing the formatted selected portion as the reproducible page.

23.   The apparatus of claim 21, the storage device further comprising instructions for performing steps of:

25   formatting at least a portion of the document subsequent to the formatted selected portion to provide a subsequent formatted portion; and

providing the formatted selected portion as the reproducible page when the subsequent

formatted portion is acceptably formatted.

24.   The apparatus of claim 21, the storage device further comprising instructions for performing steps of:

5   displaying the reproducible page on the display; and

        displaying the page number within the reproducible page on the display.

25.   The apparatus of claim 24, the storage device further comprising instructions for performing the step of displaying the reproducible page no later than the step of calculating the page number.

26.   A method for paginating a document that is suitable for display via a computer-based device, the method comprising steps of:

   receiving an indication of a selected portion of the document;

   determining a hard break in the document immediately prior to the selected portion;

5   determining a reproducible page corresponding to the selected portion based upon the hard break; and

   calculating a page number corresponding to the selected portion by adding a number of pages inclusively between the reproducible page and the hard break to a sum of page counts between a plurality of hard breaks prior to and including the hard break.

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27.   The method of claim 26, the step of determining the reproducible page further comprising steps of:

   determining one or more active formatting tags applicable to the hard page break; and

   formatting pages from the hard break to the selected portion, inclusive of the selected portion,

15   based on the one or more active formatting tags to provide a formatted selected portion; and

   providing the formatted selected portion as the reproducible page.

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28.   The method of claim 27, further comprising steps of:

   formatting at least a portion of the document subsequent to the formatted selected portion

20   to provide a subsequent formatted portion; and

   providing the formatted selected portion as the reproducible page when the subsequent formatted portion is acceptably formatted.

29.   The method of claim 26, further comprising steps of:

25   displaying the reproducible page on a display of the computer-based device; and

   displaying the page number within the reproducible page on the display.

30.   The method of claim 29, wherein the step of displaying the reproducible page is performed no later than the step of calculating the page number.